



Form GSOP I-PIN (04/98)

STATE OF CALIFORNIA  
Department of General Services - Office of Procurement  
**PURCHASE ORDER**

Page 1

Purchase Order No. Rev. Date  
62369 6/29/2009

Supplier No.	Solicitation No.	Delivery Date	FOB Point	Invoice Terms
798322	57328	140 Days ARO	Destination	

PAPE' MACHINERY, INC.  
2850 EL CENTRO ROAD  
SACRAMENTO, CA 95833  
Attn: DAVID CONGER

S DEPT OF FORESTRY & FIRE C FORESTRY & FIRE PROT A-45  
h T PROTECTION h a T ATTN: RICHARD ARMSTRONG  
i o 5950 CHILES ROAD r o (SAME AS SHIP TO ADDRESS)  
p DAVIS, CA 95618 g e  
Attn: RICHARD ARMSTRONG

Agency Billing	Agency Purchase Estimate	Purchase Estimate	Revision
13067	7EE8D008(*)	67446	0

Phone: 916-922-7181

Agency Contact	Phone	Date Received
RICHARD ARMSTRONG X200	530-757-2407	

Item No.	Quantity	Unit	Commodity Code	Description	Unit Price	Extension
THE GENERAL PROVISIONS FOR NON-IT COMMODITIES ARE HEREBY INCORPORATED BY REFERENCE. THESE GENERAL PROVISION CAN BE OBTAINED BY PHONING (916) 375-4400 OR BY ACCESSING OUR WEBSITE AT: <a href="http://www.documents.dgs.ca.gov/pd/modellang/GPnonIT0407.pdf">www.documents.dgs.ca.gov/pd/modellang/GPnonIT0407.pdf</a>						
THE FOLLOWING INFORMATION IS PROVIDED FOR AGENCY USE ONLY: PRIME CONTRACTOR: NS FISCAL YEAR: 2008 / 2009						
1	1	EA	2420-000-0003-2	BULLDOZER (AS DESCRIBED) BULLDOZER, MEDIUM, in accordance with Department of Forestry and Fire Protection Specification # IFB-6X-F/Y 08/09, of eight (8) pages, dated November 2008.	273,180.0000	273,180.00
Proposed Brand: <u>JOHN DEERE</u>						
Model: <u>MT 750J</u>						
THE FOLLOWING OPTIONS TO BE INCLUDED ON THIS PURCHASE ORDER:						
1 ea.				FIRE PROTECTION SYSTEM, in accordance with section 11.1 of Department of Forestry and Fire Protection Specification # IFB-6X-F/Y 09/09, dated November 2008.	\$3,844.00	
1 ea.				Fire Slewing, in accordance with section 11.2 of Department of Forestry and Fire Protection Specification # IFB-6X-F/Y 09/09, dated November 2008.	\$3,127.00	

Sales and/or use tax to be extra unless noted above

Buyer	Phone	BOC Number
 LONNIE WILLIAMS	916-375-4586	

## Department of General Services - Office of Procurement

## Page 2

Form GSOP 2-PIN (04/98)

<i>Purchase Order No.</i>	<i>Revision</i>	<i>Date</i>	<i>Supplier No.</i>	<i>Supplier Name</i>
62369		6/29/2009	798322	PAPE' MACHINERY, INC.

Item No.	Quantity	Unit	Commodity Code	Description	Unit Price	Extension
1 ea.				Hi Temperature Hoses, in accordance with section 11.3 of Department of Forestry and Fire Protection Specification # IFB-6X-F/Y 09/09, dated November 2008.	\$818.00	
<u>PO Miscellaneous Charges and Discounts</u>						<u>Dollar Value</u>
BATCH ADJUSTMENT (CHARGE)						3,844.00
BATCH ADJUSTMENT (CHARGE)						3,127.00
BATCH ADJUSTMENT (CHARGE)						818.00
					Total Value:	280,969.00
<u>F.O.B. DESTINATION</u>						
For the purpose of this order only F.O.B. Destination will be accepted.						
<u>DELIVERY</u>						
Delivery is to be completed in full within 140 days ARO.						
Delivery to be made during normal business hours, Monday through Friday, 7:30 am - 4:30 pm, except State Holidays						
The Bulldozer is to be delivered to the following address:						
All required documentation shall be sent to the address below by the time of delivery.						
Department of Forestry and Fire Protection 5950 Chiles Road Davis, Ca 92506 Attn: Richard Armstrong Phone (530) 757-2407						
<u>FEDERAL EXCISE CERTIFICATE</u>						
Federal Excises Tax Exemption Certificate attached.						
<u>ATTACHMENTS</u>						
The following documents are attached and part of this purchase order.						
1. Department of Forestry and Fire Protection Administrative Requirements IFB # 6X - F/Y 08/09.						
2. Specification # IFB - 6X - F/Y 08/09 of eight (8) pages, dated November 2008.						
<u>PRECONSTRUCTION CONFERENCE :</u>						
After award a preconstruction conference shall be held between the State and contractor within 30 calendar days after formal award of the purchase order. This conference shall be held prior to the start of any construction. The purpose of this meeting is to review specifications, resolve any questions concerning the specifications and/or variations of the chassis.						
Contact: Department of Forestry and Fire Protection 5950 Chiles Road Davis, CA 95618 Attn: Richard Armstrong Phone: (530) 757-2407						

**Department of General Services - Office of Procurement**

## Page 3 (Last)

Form GSOP 2-PIN (04/98)

<i>Purchase Order No.</i>	<i>Revision</i>	<i>Date</i>	<i>Supplier No.</i>	<i>Supplier Name</i>
62369		6/29/2009	798322	PAPE' MACHINERY, INC.

Item No.	Quantity	Unit	Commodity Code	Description	Unit Price	Extension
<p>This Purchase order has been registered into the state contact and procurement registration system (<a href="https://www.scprs.dgs.ca.gov/">https://www.scprs.dgs.ca.gov/</a>). The registration number is ep1018113.</p> <p><u>CHANGE ORDERS</u></p> <p>This Purchase Order may be amended, modified, or terminated at any time by mutual agreement of the parties in writing. Change order amending, modifying or terminating the Purchase Order, including any modifications of the compensation payable may be issued only by the State Procurement Officer. All such change orders shall be in writing and issued only upon written concurrence of the supplier. Termination, as that term is used in this section, does not include termination for default of the supplier.</p>						

## **GENERAL DESCRIPTION**

This specification contains the detailed Administrative and Technical Requirements pertaining to Fire Dozers utilized by Cal Fire which must be met in order to be considered responsive to this solicitation.

The Firefighting bulldozer shall be new and unused, be the manufacturer's latest current production model and design, must be furnished with all the standard equipment/accessories including optional equipment necessary to meet agency specific requirements and must be referenced in the manufacturers published literature. All bidders shall furnish for the proposed machine, published literature, such as parts catalogs, production specifications, sales brochures, and etc. Statements made by the bidder that are not supported by published literature will not constitute satisfactory proof and will not be accepted as such.

The bidder may propose solutions that incorporate components, accessories and/or factory approved modifications and the bidder's response must be clearly cross-referenced to the specification to which it applies and must be supported by the OEM's parts distribution system.

Optional equipment and features must be manufacturer/dealer installed, covered by the manufacturers warranty, must have part numbers as referenced in the manufacturers published literature, and be available through the manufacturer's parts distribution system.

Features that are listed here must be the manufacturers latest updates and any substitutions shall meet the intent and capability of the identified components listed and/or described and must be pre-approved by Cal Fire Mobile Equipment Management.

**Bids which offer "Custom Built Parts" to meet the requirements of this specification or parts not manufactured to a tolerance which guarantee's absolute interchangeability between all units and is not supported by the OEM's parts distribution system shall be rejected.**

## **ADMINISTRATIVE REQUIREMENTS**

### **1.0 General Requirements**

Cal Fire has determined that it is best to define its own needs, objectives, and operating environment. Cal Fire will not tailor these needs to fit a particular solution a bidder may have available; rather, bidders shall propose to meet Cal Fires needs as defined in this specification.

All of the items described in this specification are levels and/or terms and conditions that Cal Fire expects to be satisfied by the bidders. Bidders must indicate their willingness and ability to satisfy these requirements.

The State reserves the right to award or reject any bid/offer or proposal based on the completeness of vendor proposal, compliance with requirements, economic value, delivery, and other purchase requirements as listed in attachments.

### **1.1 Pre-construction conference**

After award, to ensure contract compliance elements will be met, a conference with the successful bidder will be conducted at the Cal Fire Davis Equipment Facility, 5950 Chiles Rd. Davis, CA. 95618.

## **1.2 Delivery Schedule**

The Firefighting Bulldozer shall be fully functional and delivery shall be delivered within 20 weeks from receipt of signed purchase order.

## **1.3 FOB Destination**

The vendor shall contact Cal Fire Mobile Equipment Management five (5) working days prior to delivery. The delivery destination shall be FOB to Cal Fire, Davis Equipment Facility, 5950 Chiles Rd. Davis, Ca. 95618, Phone (530) 757 - 2407. Business hours are Monday through Friday, 7:30 a.m. to 4:30 p.m.

## **1.4 Customer Reference/ Dealer Requirements**

Customer references are intended to gather information related to the bidder's experience for successfully servicing accounts similar to the State. Customer reference responses must be completed and returned with the bid.

The customer reference response(s) must be for new or used bulldozers no older than five (5) years old, and must be for machines purchased within the last five (5) years from the date of release of this Invitation for Bid (IFB).

The references must be from six (6) customers located within California who routinely purchase repair/replacement parts and utilize the factory authorized dealers for repair and or warranty work, and only one of these references shall be for a bull dozer purchased by other state agencies. This list must include the business or agency name, the contact person, e-mail address and phone number of customers.

The State may at its discretion randomly contact a number of customers to assess their satisfaction with the availability and timeliness of parts delivery and repairs, including the quality of dealer conducted repairs.

The bidder's Reference Response Form must be fully completed by the customer and it must be returned directly to the bidder. The bidders must then submit the completed Customer Reference Forms with their bid submittal. Customer references must be signed and dated (after the release of the IFB), including the most current contact information (including the name of the person completing the form, phone, and email) for easy reference check by the State's Evaluation Team.

(Note: Photo copy reproductions of any customer reference response(s) submitted for any previous solicitation or contract and re-documented to reflect this IFB will not be accepted.)

An inventory of machines sold (new, used or leased) in the past five (5) years must also be provided. These machines shall be located within California and must include the owner, business or agency name, the contact person, e-mail address (if available) and phone number. This list shall include the location or duty station of the machine which must be used routinely in steep, mountainous, and rugged terrain such as logging or fire suppression activities.

### **1.5 Machine Familiarization/Technical Support**

The successful bidder must provide technical support and machine familiarization by means of OEM trained technical support staff to Cal Fire personnel at such locations as required by Cal Fire during the initial warranty period.

Technical support shall be provided by employees of the manufacturer/dealer or through sub-contracts that are in place at the time of the bid opening. If the bidder is not the manufacturer/dealer, the bidder cannot fulfill this requirement with personnel employed by the manufacturer/dealer unless the bidder has a binding contract with the manufacturer to provide technical support for this specification. Upon bid submittal, the bidder shall identify the qualifications of the technical support personnel.

### **1.6 Initial Training/Familiarization Requirements**

A minimum of one (1) eight (8) hour training session of basic machine familiarization shall be provided for Cal Fire equipment operators within 30 days after notification by Cal Fire. The familiarization training will be limited to agency personnel who are assigned to each of the machines purchased on this IFB or consecutive purchases and must be a combination of class room and hands on operations.

The machine familiarization training shall be conducted on mutually agreed upon dates at the Cal Fire Academy in Lone, Ca. The machine familiarization training will be provided for up to a maximum of three (3) personnel for each machine on order.

#### **The familiarization training shall cover the following subjects:**

- Operating instructions, warnings, precautions & safety checks
- Equipment controls & instrumentation, where they are located, what they do and how they work
- Engine operation, including start- up and shut-down procedures
- Proper operation of the steering system, including maneuvering, forward/reverse operation & stopping
- Basic implement operation & limitations
- Machine capacity, stability and operating limitations
- Preventative and routine inspection & maintenance

### **1.7 On-going Training/Familiarization Requirements**

The manufacturer/dealer shall provide an annual on-going training/familiarization/refreshers session for agency employees for a period of two (2) years after acceptance of the machine on this or consecutive orders. This training/familiarization session shall consist of the requirements addressed in section 1.6 for approximately 20 personnel at the Cal Fire Academy in Lone, Ca. If appropriate, the training sessions may be broken into smaller groups. The "Heavy Fire Equipment Operator" class is generally conducted during the months of April and May. For scheduling purposes of this training session the manufacturer/dealer shall provide Cal Fire with the contact name and phone numbers of their training staff.

### **1.8 Service and Parts**

Firefighting is the fundamental assignment for these machines. Parts availability and support is a critical component of minimizing out of service time periods. A comprehensive parts supply system throughout the State of California, allowing for almost immediate delivery of repair parts and supplies is required. At the time of bid submittal, all bidders must provide locations of all factory authorized service/repair facilities which offer factory authorized service and warranty for the machines they are offering. Including, businesses, drop boxes, bins, loading docks and etc, used to relay parts and supplies throughout the state regardless of dealership/territory boundaries.

These delivery points shall be FOB within a 50 mile radius of each Cal Fire Unit Headquarters. Instructions shall be provided for on-line ordering, telephone numbers, and directions to major dealerships and parts delivery locations throughout the state in order to provide an avenue to relay, order, or pick up parts and supplies in support of Cal Fire's fleet of firefighting bulldozers.

To meet the continuing service and parts needs of Cal Fire, replacement parts must be made available to the Cal Fire location which places the order within a 48 hour time limit from the date of the order, whether the order is made by telephone or in writing.

During the warranty period, repair parts shall be readily available from the dealer/manufacture. Freight or transportation costs for warranted parts are the responsibility of the dealer/manufacture (FOB) and the use of overnight delivery is mandatory when a machine is out-of-service due to needed parts.

(See Attachment for locations of Cal Fire Unit Headquarters)

### **1.9 Factory Diagnostic CD and Parts/Repair Manuals**

Two (2) sets of operator's manuals, complete lubrication instructions, parts books and shop repair manuals, including electrical and hydraulic schematics shall be supplied for each machine on this order. CD versions are acceptable in lieu of hard copies. Additionally one (1) set of OEM diagnostic program CD's which do not require a subscription fee shall be supplied for each machine on this order.

### **1.10 Miscellaneous Requirements**

**1.10.1** The first required inspection and annual service as designated by the OEM service manual shall be provided by the dealership at no cost to Cal Fire. This service may be provided by the dealerships traveling technician and shall be conducted at the assigned duty station of the machine. The service shall include a complete safety inspection and any required fluid and filter changes.

**1.10.2** Upon final delivery, the dealership/manufacture shall provide Cal Fire with the following for each machine on this order.

- A complete set of OEM filters, air, oil, fuel, hydraulic and etc.
- A complete set of window glass securely boxed or crated.

### **1.11 Warranty**

Due to the limited hours that firefighting dozers operate annually, the machine, including any modifications and/or optional equipment or accessories installed by the dealer/manufacture, shall be fully warranted from the actual in-service date of the dozer(s) to be free from defects in

materials and workmanship for a minimum of five (5) years or 1,000 engine hours whichever occurs first.

Full warranty service including repairs, recalls, adjustments and exchange parts shall be available at all sponsored dealerships, regardless of sale or ship points.

The warranty period for dealer installed components from other manufacturers that carry different time limitations shall start with the in-service date of the machine, not the date of component manufacture and shall be the responsibility of the dealer/manufacture until those warranty periods expire.

Exclusions from the warranty shall include any part becoming defective as a result of misuse, negligence, accident, failure to provide routine maintenance or normal wear and tear items.

Warranty issues during the five (5) year warranty or component warranty periods shall be at the dealers/manufacturers expense. The dealer/manufacture shall repair or replace any defective part or materials at no cost to Cal Fire during these time frames. The dealer/manufacture may dispatch a traveling technician to perform warranty repairs.

At the time of bid submission, each bidder shall state the locations of their service and repair facilities. During the five (5) year warranty period, if warranty repairs cannot be accomplished by a traveling repair technician and the machine must be transported to an authorized repair facility this transportation shall be furnished by the dealer/manufacture at no additional cost to Cal Fire if the repair facility is beyond a 150 mile radius of each Cal Fire Unit Headquarters.

The use of a traveling repair technician in the performance of warranty repairs does not relieve the manufacturer from the provision of the required parts and repair facility. Traveling technicians are to be used to minimize out of service time only, not substitute as a parts and repair facility.

If it is necessary for the machine to be delivered to the dealers authorized repair facility, the contractor must notify Cal Fire within 24 hours after the machine is delivered with an estimate of repair down time.

The dealer/manufacture shall be responsible for any and all OEM installed component(s) that fail prematurely or are damaged from improper installation by the dealer/manufacture.

If the dealer or repair facility does not perform warranty repairs to the satisfaction of Cal Fire or is not performing these repairs in the agreed upon time frame it may be cause for elimination from bidding on future contracts.

The machine shall be maintained and serviced by Cal Fire journey level repair technicians in accordance with Cal Fire Mobile Equipment Guidelines. Cal Fire Repair Technicians performing routine service or emergency repairs during the dealer/manufacture's warranty period shall not void any warranties.

Cal Fire's preventive maintenance program shall meet or exceed the minimum OEM's suggested maintenance schedule and shall be considered sufficient to meet all warranty requirements.

As Cal Fire's equipment operates over a large portion of the State and the equipment must be repaired throughout the State, the bidder must indicate by letter the procedure to be followed by Cal Fire in handling items and conditions covered by warranty or guarantee, this information must accompany the bid.

Warranty certificates and/or cards shall be supplied for each individual machine.



Questions concerning the maintenance program should be directed to Cal Fire Mobile Equipment Management at (530) 757-2407.

(See Attachment for locations of Cal Fire Unit Headquarters)

### **1.12 Penalty Clause**

The parties to this agreement acknowledge that the State shall incur actual damages should the manufacturer/dealer fail to perform the work as specified herein or should the manufacturer/dealer be unable to deliver the completed machine within the agreed upon delivery schedule. The parties, therefore, have agreed to late delivery charges in the amount of \$500.00 per unit, per work day, which is the rental rate for a comparable unit.

Work days are Monday through Friday inclusive, except declared State holidays observed Monday through Friday inclusive.

The parties also agree that the amount specified is neither unreasonable nor punitive in nature because both parties have carefully considered the amount specified and believe it to be a reasonable estimate, and not excessive at the time the Purchase Order is entered into.

It is therefore agreed, that the contractor shall pay the State of California the sum of \$500.00 per unit per workday (as stated above) for each workday the machine remains incomplete or unacceptable by the State. Late delivery charges shall be assessed until the final acceptance and delivery of the completed machine to the Cal Fire Davis Equipment Facility. The total late delivery charges assessed against the contractor shall in no event exceed twenty-five (25 %) of the total value of the entire contract.

The contractor shall agree to pay late delivery charges as herein described. In the event that such late delivery charges are not paid, the contractor agrees that the State shall deduct the amount thereof from any monies due or that may become due to the contractor.

### **1.13 Final Inspection**

The final inspection is a two-phase process. The completed machine as presented to Cal Fire for the inspection process shall be serviced, cleaned internally and externally and full of fuel.

The first phase or pre-delivery inspection, the machine shall be inspected at the dealership prior to shipment to the final destination. This inspection shall include: specification compliance, workmanship, appearance, proper operation of all components and systems and any corrections shall be made prior to shipment. It is the dealer's responsibility to notify Cal Fire five (5) working days in advance to schedule this inspection. Authorization to deliver the machine will be granted by Cal Fire only after this inspection is completed.

If additional interim inspections are required, such inspection trips shall be at the expense of the dealer at a cost of \$75.00 per hour, including travel time, meals, lodging and any

cost of transportation. These costs will be deducted from the purchase order payment.

The second phase or final acceptance and operational check shall be accomplished within five (5) working days by Cal Fire after delivery to the final FOB destination. This inspection consists of re-inspection of items/repairs noted during the pre-delivery inspection and that all documents are present. In the event that deficiencies were not corrected and/or additional deficiencies are detected, the machine shall be rejected and the delivering dealer shall be required to make the necessary repairs, adjustments or replacements.

If the dealer receives notice in writing that the machine is not acceptable, the machine shall be removed within seven (7) calendar days. If the dealer fails to remove said machine from the State's facilities within the specified period, the State may forward said machine to the dealer's repair center by common carrier at the dealer's expense and risk.

Payment and/or commencement of a discount period (if applicable) shall not be made until all defects are corrected and the machine is accepted. The dealer/manufacture shall be responsible for any and all costs associated with returning a rejected machine to their designated repair center and the return to Cal Fire.

Failure to comply with specifications or construction may result in a rejection of machinery.

Completion of the final acceptance and operational check by Cal Fire shall in no way releases the dealer/manufacture from satisfying the requirements of the contract specifications or warranty.

#### **1.14 Travel Expenses**

For dealers whose facility is located within the State of California. The first phase or pre-delivery inspection, Cal Fire shall deduct the cost of travel and transportation expenses from Sacramento and return for the inspection staff from the vendor's final invoice.

The inspection staff shall consist of two (2) Cal Fire personnel.

Travel expenses shall be allowed in accordance with the Department of Personnel Administration (DPA) regulations, Title 2, California Administrative Code, Chapter 3, Subchapter 1, Article 2, Traveling Expenses.

A brief description of the State per-diem rate follows:

##### **Statewide**

Lodging	\$ 84.00 + tax, w/receipt
Breakfast	\$ 6.00
Lunch	\$ 10.00
Dinner	\$ 18.00
Incidentals	\$ 6.00
Total:	\$124.00 + tax (for every 24 hour period)

#### **1.15 Out of State Travel**

Should the contract be awarded to a vendor whose dealership facility is located outside the State of California, all travel and transportation expenses for the Cal Fire Representatives shall be arranged and pre-paid by the vendor. Travel and transportation expenses shall be arranged from Sacramento, Ca. to the contractor's manufacturing facility and return.

#### **1.16 Transportation Expenses**

Transportation expenses consist of the charges for commercial carrier fares, private or State vehicle mileage allowances, overnight and day parking for State or privately owned vehicles, bridge or road tolls, taxi or street car fares and all other charges essential for transportation.

When air travel is used, the Cal Fire personnel shall use Sacramento International Airport. Claims for transportation by the scheduled airlines shall be allowed at the lowest fare available in conformity with the regular published tariffs for scheduled airlines in effect on the date the flight originated.

#### **1.17 In-Service Notification**

The In-Service Date is defined as the actual date the tractor is released for use to the field, not sale date, nor the delivery date to CAL FIRE, 5950 Chiles Road, Davis, California 95618. The in-service date shall not exceed 90 days past the delivery/sale date of tractor to CAL FIRE.

#### **1.18 Invoicing Requirements**

Unless otherwise specified, invoices shall be sent to the address set forth herein. Invoices shall be submitted in triplicate and shall include the purchase order number, item number, unit price, extended item price, any cash discount offered and invoice total amount. State sales tax shall be itemized separately and added to each invoice as applicable.

Processing vendor payments and/or cash discounts (if applicable) shall be defined as beginning only after the apparatus has been delivered and the final acceptance inspection has been performed. If late delivery charges occur, the penalty charges shall be deducted from each individual invoice.

#### **1.19 Quantity Increase**

Cal Fire reserves the right to purchase up to 3 additional dozers at the bid price within 180 days of award.

**STATE OF CALIFORNIA**  
**THE RESOURCES AGENCY**  
**DEPARTMENT OF FORESTRY and FIRE PROTECTION**  
**(CAL FIRE)**

**TECHNICAL SPECIFICATIONS**

IFB # 6X – F/Y 08/09  
FIREFIGHTING BULLDOZER  
November 2008



**2.1 Introduction**

This section establishes Cal Fire's "minimum technical requirements" for a Fire Fighting Bull Dozer which is utilized exclusively for emergency incidents such as floods, earthquakes and fire suppression activities.

**2.2 Cab Assembly/Operators Station**

- 2.2.1** Fully Enclosed Environmental Cab
- 2.2.2** Rollover Protective Structure (ROPS)
- 2.2.3** Falling Object Protective Structure (FOPS)
- 2.2.4** Single Lever "Joy Stick/Tiller Bar" for Steering & Transmission Controls
- 2.2.5** Forestry Arrangement with all guarding, metal plates, sweeps/screens
- 2.2.6** Adjustable, Mechanical Suspension, Vinyl Seat
- 2.2.7** 3" Wide Retractable Seat Belt, conforming to SAE J386
- 2.2.8** Two (2) 12 volt Power Points
- 2.2.9** A 20 Amp, 12 Volt Power Converter
- 2.2.10** AM/FM Weather Band Radio
- 2.2.11** Convex Interior Rear View Mirror
- 2.2.12** Minimum Multi-Speed 24,000 BTU Air Conditioner, the air conditioner unit must be mounted below the cab roof line
- 2.2.13** Multi-Speed Cabin Heater w/Front & Rear Defrosters
- 2.2.14** Cabin Fresh Air Filter must be HEPA type
- 2.2.15** Interior Dome Light
- 2.2.16** Two (2) Speed Front & Rear Windshield Wipers & Washers
- 2.2.17** All OEM Key Type Locking Doors shall be keyed alike
  - Cal Fire shall use agency padlocks for doors which accept padlocks

- 2.2.18** Winch Ready Option, all required handles, plumbing, lights, labeling, etc necessary for winch operation inside cab
- 2.2.19** Console Cover and Trim for Winch Controls includes dash cover, trim, and hardware needed to install winch controls.
- 2.2.20** Instrumentation shall feature visual & audible warning and consist of the following; Engine Oil Pressure, Engine Coolant Temperature, Transmission Oil Temperature, Hydraulic Oil Temperature, Engine Hour Meter, Fuel Level, System Voltage, Air Filter Restriction.
- 2.2.21** All Service Instructions and Warning Labels shall be in the English Language.

### **3.0 Power Train**

- 3.1** Inline 6 Cylinder Diesel Engine 145 HP. (Minimum)
- 3.2** Engine lubrication adequate to permit operations on slopes up to 45 degrees.
- 3.3** Must be certified EPA Tier III emissions.
- 3.4** Two (2) Stage Air Cleaner w/Hi-Heat centrifugal pre-cleaner which meets NFPA 1906, Section 5.2.4.2.1.3 (Best-Ex Centri).
- 3.5** Air to Air Aftercooling for hi-altitude operation up to 8,000 ft. w/o fuel delivery de-rating
- 3.6** Single Engine Drive Belt with Automatic Tensioner
- 3.7** Cold Weather Starting Aid
- 3.8** Heavy Duty 24 Volt Battery System, Group 31 Batteries, Minimum 950 CCA
- 3.9** Minimum 79 Gallon Fuel Tank, must be adequate to operate a 10 hour shift w/o refueling
- 3.10** Hydraulic Oil Cooler
- 3.11** Direct Drive or Reversible Hydraulically Driven Engine Cooling Fan
- 3.12** Electrical Fuel Priming Pump with integrated fuel/water separator
- 3.13** Selectable Engine Speed Decelerating Function with Foot Pedal Control
- 3.15** Automatic Load Sensing Transmission
- 3.16** Automatic Up and Down Shifting
- 3.17** Steering and Transmission Controlled by Tiller/Joystick
- 3.18** Minimum 80 Amp Alternator

### **4.0 Blade Assembly**

- 4.1** A Variable Pitch, Hydraulically Controlled Power Angle Tilt (VPAT) bulldozing blade w/Brush Guard including all necessary valves and controls necessary for operation shall be installed.
- 4.2** Reversible Bolt-On Cutting Edges with End Bits
- 4.3** The Maximum Blade Width Angled shall not exceed 120".

### **5.0 Undercarriage**

- 5.1** Extended Life Undercarriage
- 5.2** Sealed and Lubricated Track Chain w/Split Master Link
- 5.3** Extended Life Lubricated Track Rollers
- 5.4** Carrier Type Flange Rollers
- 5.5** 40 Section, 24" Extreme Service Closed Center Track Pads
- 5.6** Hydraulic Track Adjusters
- 5.7** End Track Guiding Guards

- 5.8 Extended Life Segmented Sprockets
- 5.9 Bolt-On Track Roller Guards (Rock Guards)
- 5.10 Front Pulling Device (hook or ring)
- 5.11 Rigid Drawbar w/pin

## **6.0 Winch and Fairleads**

- 6.1 A Minimum 50,000 pound hydraulic driven, factory installed winch, mounted at the rear of the machine shall be provided with all required labeling, controls, hydraulic system, etc. (PA55 or Equal)
- 6.2 Winch installation and controls shall be provided with all necessary guarding, hose routing, electrical connections warning labels and panel installations needed to allow for operation from inside the cab
- 6.3 A Hi-Flow Load Sensing four (4) Valve Hydraulic System with Cooler shall be installed for operation of bulldozing blade and rear winch.
- 6.4 Dual Control Arrangement with Remotes at Rear of Tractor (If Available)
- 6.5 The winch shall be furnished with a minimum of 150' of 7/8" diameter 6 X 25 IWRC wire rope with 1" X 24" tail chain and hook equal to the rating of the winch.
- 6.6 A four (4) Roller Fairlead, shall be mounted on the rear of the winch

## **7.0 Forestry/Firefighter Requirements**

All heavy duty guarding & safety equipment for the forestry/firefighter application shall be the manufacturer's maximum rated for severe duty and shall include the following:

- 7.1 Minimum four (4) Hi-Intensity (HID) work lights, two (2) front facing & two (2) rear facing, in addition to standard lighting package
- 7.2 Dealer shall provide and install the CAL FIRE Strobe Light & Siren/P.A. Safety Equipment Package (See attached Fix-N-Fax # 116 for details)
- 7.3 Heavy Duty Hinged Front Grill for Radiator
- 7.4 Heavy Duty Fenders
- 7.5 Heavy Duty Sheet Metal Overall
- 7.6 Heavy Duty Fuel Tank Guard
- 7.7 Locking Heavy Duty Engine Enclosures/Access Doors
- 7.8 Heavy Duty Latches & Hinges
- 7.9 Hydraulic Tank Guard
- 7.10 Fuel Cap Guard
- 7.11 Oil Crankcase Guard
- 7.12 Aluminum Bar & Plate Trash Resistant Radiator
- 7.13 Lift Cylinder Guard for 6 way PAT Bulldozing Blade
- 7.14 Guarding for Front Hydraulic Lines and Hoses
- 7.15 Full Width Sweeps, painted black, to move trees and limbs away from cab area
- 7.16 Bolt-on Solid Plate above sweeps to protect cab from falling debris
- 7.17 Hinged Side Screens, painted black
- 7.18 Hinged Rear Window Screen, painted black
- 7.19 Hinged Cab Door Screens, painted black
- 7.20 Hinged or Bolt-on Air Conditioning Condenser Brush Guard
- 7.21 Tempered or Safety Glass **polycarbonate glass is unacceptable**

**NOTE:** All window and door screens must be hinged, exterior mounted, and **certified to SAE J1084 and OSHA 1910.266**

**SPECIAL NOTE:** To reduce the "out of service" time associated with replacing glue-in window glass during emergency operations, all glass shall be retained in a an automotive type perimeter rubber seal strip, removable and reusable, with a factory part number provided for replacement.

## **8.0 Standard Equipment**

- 8.1** Fluid Sampling Taps
- 8.2** Environmental "No-Spill" Oil Drain System
- 8.3** Remote Lube Banks
- 8.4** Back-up Alarm
- 8.5** Vandal Protection Package

## **9.0 Finish Color**

- 9.1** Color shall be the Manufacturers Standard Lead Free Yellow Enamel w/Cab Roof Painted White

## **10.0 Product Link System for Factory Communication**

A non-subscription fee satellite communication system for the five (5) year warranty period which is similar to one commonly know as GM ONSTAR, shall be provided to allow direct factory communication with the machine to monitor system functions and location. This system shall include technology which affords the opportunity to conduct repairs, clear check-engine fault codes as well as monitor critical components during fire suppression activities.

## **11.0 Non Award Options**

- 11.1** On-board "Fire Protection System" consisting of a stainless steel water/foam tank, corrosion resistant (non-plastic) fittings and strategically place nozzles in the engine compartment to extinguish potential belly pan fires
- 11.2** Fire Sleeving on hoses and electrical harnesses
- 11.3** Hi-Temperature resistant fuel hoses

## **CUSTOMER REFERENCE**

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

Phone Number \_\_\_\_\_

E-Mail Address \_\_\_\_\_

Year, Make & Model of Bulldozer \_\_\_\_\_

Do you own or lease \_\_\_\_\_

Average operating hours per year \_\_\_\_\_

Type of terrain machine is operated in? \_\_\_\_\_

Name of local dealership \_\_\_\_\_

Average delivery time for ordered parts \_\_\_\_\_

Is your machine owner or dealer maintained \_\_\_\_\_

If dealer maintained, are you satisfied with quality of repairs? \_\_\_\_\_

Timeliness of repairs? \_\_\_\_\_

Cost of repairs? \_\_\_\_\_

In your opinion, do you feel you experience an above average amount of mechanical, electrical or hydraulic break downs? \_\_\_\_\_

Customer Signature \_\_\_\_\_

Date \_\_\_\_\_





FIX-N-FAX # 116

### **BULLDOZER STROBE AND SIREN/PA SAFETY EQUIPMENT**

In August of 1990 the results of the Bulldozer Operations Review determined that certain safety devices, such as roof mounted strobe lights and siren/pa systems shall be required on Cal Fire's bulldozers. This Fix-N-Fax is to set a mandatory compliance for these safety devices to be installed on all Cal Fire's bulldozers.

The strobe light assembly and power supply unit are manufactured by Whelen Engineering. Activation of the 12 volt strobe light assembly shall be via a toggle switch which shall be mounted and labeled in the same location where other lighting controls are mounted.

The strobe light assembly is to be mounted on the top of the bulldozer at the rear edge of the cab. On the newer bulldozers the strobe light can be incorporated into or on top of the guard for the A/C condensers. Under no circumstances should the light exceed the legal height requirements.

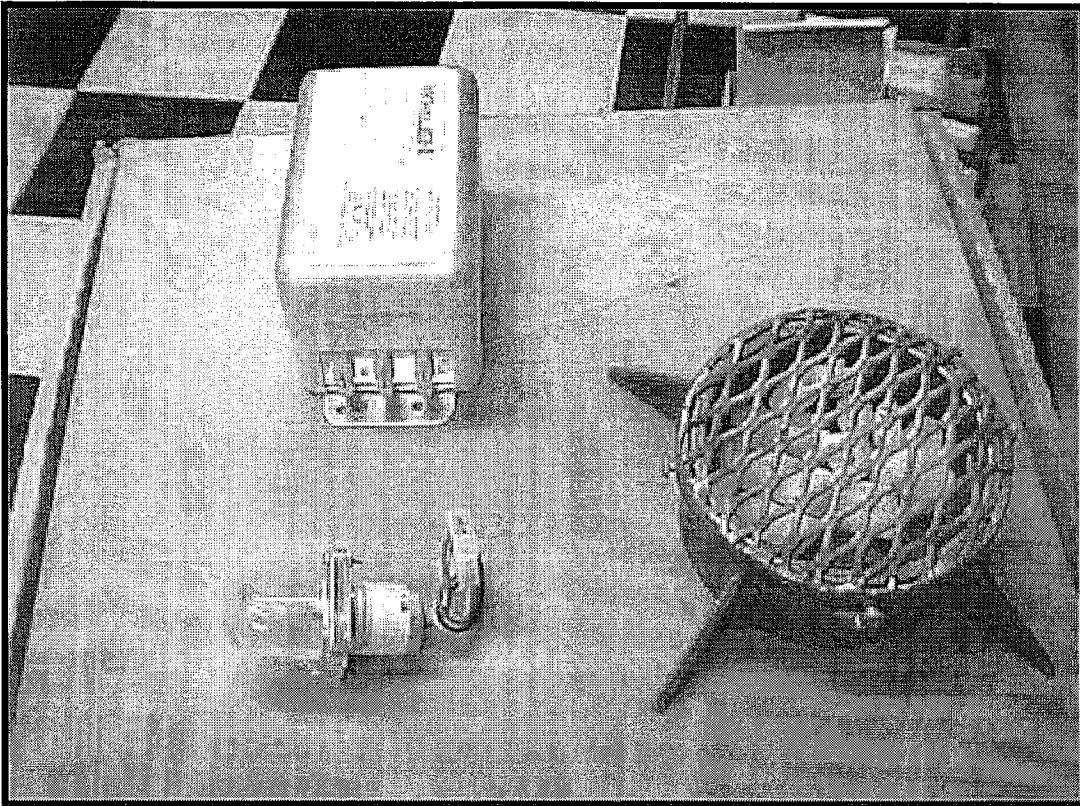
A siren/pa system was developed to give the operator another means of communicating with those who are working in the area of the machine. With its unique siren tone, the operator is able to warn personnel working down slope or below the bulldozer of any hazards.

The Federal/Signal Touchmaster, siren control Part # UTM-902 with the associated MS 100 speaker provides this siren/pa system. The siren controller is to be installed in the cab at a location convenient to the operator. The installation is similar to the installation of any other siren control device.

The Federal/Signal MS 100 siren speaker shall be mounted in a forward facing position, securely fastened to the dozer exterior in such a location to be clear of damage from foreign objects.

See attached photo of the components including the strobe light guard. The guard shall be securely fastened or welded to the exterior roof of the dozer cab or air conditioner unit. It shall feature a removable cover to access the bulb for replacement purposes.

**Note:** Cal Fire, upon request shall supply a sample of the strobe light guard as this component is not commercially available and will need to be fabricated to match. All requirements shall be discussed at the pre-construction conference.



**Part Numbers:**

**STROBE & POWER UNIT**

Whelen Engineering

Strobe Bulb Part # A625

Power Supply Part # A490, TS-CF HTS P/S

**SIREN/PA SYSTEM:**

Federal/ Signal Touchmaster Series

Model # UTM-902 CDF w/ noise canceling microphone

Speaker;

Federal/Signal DynaMax Speaker

Model # MS100

**Note:** No exceptions to manufacturer or part numbers mentioned in this Fix-n-Fax

The above items may be purchased from the following vendor;

Lehr Auto Electric  
4707 Northgate Blvd.  
Sacramento, CA. 95834  
(916) 646-6626

**CAL FIRE**  
**STATEWIDE UNIT ADDRESS LIST**

**NORTHERN REGION**

Mendocino	17501 North Highway 101, Willits, CA. 95490
Humboldt-Del Norte	118 Fortuna Blvd, Fortuna, CA. 95540-0425
Sonoma-Lake-Napa (NW)	2210 W College Ave, Santa Rosa, CA. 95401
Sonoma-Lake-Napa (South)	1199 Big Tree Road, St Helena, CA. 94574
Santa Clara	15670 So. Monterey St, Morgan Hill, CA. 95037
San Mateo-Santa Cruz	6059 Hwy 9, Felton, CA. 95018-0316
Butte	176 Nelson Ave, Oroville, CA. 95965
Lassen-Modoc	697-345 Hwy 36, Susanville, CA. 96130
Nevada-Yuba-Placer	13760 Lincoln Way, Auburn, CA. 95603
Shasta-Trinity	875 Cypress Ave, Redding, CA. 96001
Tehama-Glenn	604 Antelope Rd, Red Bluff, CA. 96080
Siskiyou	1809 Fairlane Rd, Yreka, CA. 96097
Amador-El Dorado	2840 Mt Danaher Rd, Camino, CA. 95709

**SOUTHERN REGION**

Riverside	210 W San Jacinto St, Perris, CA. 92370
Riverside (Indio Shop)	47335 Oasis Blvd, Indio, CA. 92201
San Diego	2249 Jamacha Rd, El Cajon, CA. 92019
San Luis Obispo	635 No. Santa Rosa, San Luis Obispo, CA. 93401
San Bernardino	3800 North Sierra Way, San Bernardino, CA. 92405
Tulare	1968 So. Lovers Lane, Visalia, CA. 93292
Madera-Mariposa-Merced	5366 Hwy 49 North, Mariposa, CA. 95338
Fresno-Kings	9700 East American, Del Rey, CA. 93611
Tuolumne-Calaveras	785 Mt Ranch Rd, San Andreas, CA. 95249
San Benito-Monterey	401 Canal St., King City, CA. 93930